KBA Commissioning Services Statement of Qualifications

Project No. 2009-820 Commissioning Projects for Public Facilities, Statewide

State of Washington
Department of General Administration
Division of Engineering & Architectural Services
Facilities Engineering Services
Olympia, Washington

July 17, 2009 UPDATE



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July 17, 2009

State of Washington Department of General Administration Division of Engineering & Architectural Services P.O. Box 41012 Olympia, WA 98504-1012

Attention: Douglas Kilpatrick

RE: GA Energy Program Information Submittal - Commissioning Services for Public Facilities,

Statewide

Thank you for this opportunity to submit our Commissioning Services Statement of Qualifications for statewide public facilities. Keithly Barber Associates, Inc. (KBA) is a building engineering consulting firm specializing in commissioning, retro-commissioning, and system diagnostic services. Our technical staff has commissioned hundreds of projects in the United states and abroad, on facilities ranging in size from a few thousand to nearly one million square feet. Over 50% of our clients have come from the public sector, and we have extensive experience working for the Washington Department of General Administration.

KBA has in-house mechanical and electrical commissioning capability. Our employees have an average of 19 years of experience designing, installing, operating, troubleshooting and commissioning building systems of all types. Commissioning-specific experience for most of our employees ranges from 5 to 17 years, and all of our employees have hands-on testing experience. The majority of our technical staff has extensive experience with energy efficient design and control strategy optimization.

Our contact information is as follows:

Keithly Barber Associates, Inc. 14237R Ambaum Blvd. SW Burien, WA 98166 206-835-8254 Office 206-246-1691 Fax www.keithlybarber.com

Contact: Debbie Batt, Business Manager Ph: 206.835.8254 / Fx: 206.246.1691 email: debbie@keithlybarber.com

We appreciate the opportunity to have worked with the Department of General Administration in the past and we look forward to pursuing future opportunities as they arise. Thank you again for your consideration of our qualifications.

Sincerely,

Kent Barber, Principal Keithly Barber Associates, Inc.

Table of Contents

1. QUALIFICATIONS OF STAFF	4
2. RELEVANT EXPERIENCE	9
3. PREVIOUS PERFORMANCE	11
4. GEOGRAPHICAL PROXIMITY	14

1. Qualifications of Staff

The following contains the professional background, memberships or affiliations with building commissioning associations, and hands-on experience and certification of commissioning for our qualified commissioning staff.

Washington Corporate Office

Kent Barber, P.E., LEED AP Managing Principal

Relevant general commissioning experience & background: Kent is a professional engineer that has specialized in building commissioning since 1992. Nationally recognized as a commissioning pioneer, Kent was a founding member of the Building Commissioning Association (BCA). He chaired the committee that developed the BCA's Essential Attributes of Building Commissioning; a widely recognized benchmark for quality commissioning services. Kent has also developed commissioning guidelines and protocol such as the State of Idaho's guidelines for new building commissioning and retro-commissioning, and has been a leader in promoting and refining cost-effective proactive commissioning techniques, such as the control logic and integration process.

Kent has over 17 years experience commissioning many different new and existing building project types, using an array of standard and innovative project delivery and commissioning approaches. Healthcare, laboratory and educational facilities are areas of emphasis. Kent has vast first hand experience performing design reviews, writing and coordinating specifications, troubleshooting, and writing, and performing functional performance tests (FPTs). He is also widely recognized for his ability to build a truly effective commissioning team including owner, designers, builders and equipment suppliers.

The foundation of Kent's commissioning success is his diverse building industry background. He began his construction career with 10 years as a carpenter. After obtaining his BSME he became a mechanical systems designer; eventually gravitating to facilities consulting in which he worked closely with facilities managers and operators providing hands on diagnostics and mitigating design issues.

Kent holds a B.S. degree in Mechanical Engineering from the University of Colorado, and is a registered professional mechanical engineer in Washington and Colorado.

Jeremy Fugere, LEED AP, ACG CxA Principal/Senior Project Manager

Relevant general commissioning experience & background: Jeremy has over 17 years experience installing, operating & maintaining, troubleshooting and commissioning building mechanical, electrical and plumbing (MEP) systems. He began his career in the HVACR (heating, ventilation, air-conditioning and refrigeration) industry in 1992 after graduating with honors from Universal Technical Institute with a concentration in HVACR Technologies. Immediately following graduation, he was engaged in a five- year apprenticeship program consisting of ten thousand hours of academic studies and on-the-job training from which he also graduated with honors. Jeremy's previous work experiences include nine years of employment as a Journey-Level Foreman with one of the largest mechanical contractors in Washington State. While there his duties included installing, commissioning, trouble-shooting and

maintaining HVACR equipment. He subsequently spent three years as Engineer and Maintenance Manager for high-end residences and commercial buildings owned by a prominent Seattle business man and located throughout the United States and Europe. Jeremy has specialized in building commissioning for over 6 years and is an ACG certified Commissioning Authority. His commissioning resume includes educational facilities, labs, high rise buildings and mixed use projects; including many LEED and other sustainable building projects..

Ryan Hay, P.E., LEED AP, ACG CxA Principal/Senior Project Manager

Relevant general commissioning experience & background: Ryan has over 18 years of mechanical and electrical systems experience. He brings to his commissioning practice a broad base of experience as a tradesman, controls contractor, and design engineer with expertise in the design, installation, and maintenance of an extensive range HVAC, automation/controls, power distribution, lighting, data/communication, and integrated security systems. His project experience includes large correctional centers, hospitals, military facilities, industrial plants, retail centers, and educational facilities.

Ryan's electrical systems experience includes designing, verifying, and commissioning power distribution, lighting, and data/ communication, and city wide integrated security systems. Electrical building power design includes isolated grounding systems, emergency power systems, circuit breaker and equipment coordination studies including short circuit calculations, and electrical system power factor correction and power quality studies. Lighting design includes performing photometric calculations in all types of spaces and controls design. Low voltage design includes fire alarm systems, smoke control systems, fully integrated security systems.

During his 5 years as a commissioning specialist, Ryan has performed all design and construction phase commissioning activities including, owner's project requirements (OPR) and basis of design (BOD) facilitation, control logic and integration reviews, constructability reviews, commissioning plan formulation, commissioning specification writing, functional performance test writing, commissioning kickoff meetings, periodic construction site visits, maintaining commissioning issues logs, coordination of start-up activities, witnessing and performing functional tests, documenting commissioning activities in a final commissioning report. Ryan is ACG certified Commissioning Authority (CxA) and performs services on all projects in accordance with ACG and Building Commissioning Association guidelines.

Ryan has a B.S. degree in Architectural Engineering from the University of Colorado. His professional engineering licenses include: Architectural Engineer, Colorado; Building Systems Engineer Washington; Mechanical Engineer, California..

Pete Keithly, CDT, LEED AP, ACG CxA Project Manager

Relevant general commissioning experience & background: Pete Keithly has 25 years of experience in the field of facilities engineering. He has spent eleven years as a full time commissioning agent, with extensive experience in specification writing, commissioning oversight, and test engineering. Pete has taught technical college courses on HVAC controls, and has presented numerous workshops on Building Commissioning. He is a long-standing member and Past President of the Washington Association of Maintenance and Operations Administrators (Educational Facilities Master certification, 1996), a member of the Washington chapter of the Council of Educational Facilities Planners International, and a founding member

of the Building Commissioning Association (BCA) Board of Directors where he played a leading role in defining the "Essential Attributes of Building Commissioning" for the BCA. Pete is a CSI-Certified Construction Documents Technologist, as well as an ACG Certified Commissioning Agent

For the first five years of his professional career, Pete was employed by the NCR Corporation as an HVAC/Controls Technician. In 1983 he began working at Seattle-based Bon Marche Department Stores as a Building Operating Engineer, and was promoted to Assistant Facilities Maintenance Manager in 1985. From 1988 until August of 1996, Mr. Keithly was the Director of Maintenance and Operations for the South Kitsap School District, in Port Orchard, Washington. During his tenure with SKSD, he received the prestigious Christa McCullife award for Excellence in Education, and was named the 1996 School Plant Manager of the year by the National School Plant Managers Association. In 1996 Pete Keithly founded the commissioning firm that became Keithly Barber Associates, Inc.

Myra Ferriols AA, LEED AP Project Manager

Relevant general commissioning experience & background: Myra has been with KBA since April of 2004 providing commissioning services. She has performed design reviews for LEED projects, developed commissioning plans, written and executed functional performance tests, system readiness and installation verification plans, reviewed equipment and control submittals, maintained issues logs and performed site observations with reports. Her performance has proven to be a valuable asset to the KBA team. With her extensive hands-on knowledge of HVAC systems has helped KBA to provide building owners with a thoroughly-tested product. Myra has been the Project Engineer and/or Manager for K-12, higher education, science labs, pharmacy scale up labs, performance halls, vivariums and hospitals. Her excellent technical abilities are matched by an ability to communicate effectively with a wide range of project professionals and to help resolve issues cooperatively. She has spent 15 years in the field of HVAC maintenance, repairs and installation. Myra is a member of ASHRAE and the LEED US Green Building Council.

Treasa Sweek, PE, LEED AP, BCA CCP, Project Manager

Relevant general commissioning experience & background: Treasa has been helping businesses grow their commissioning lines of business for 6 years. She has been the motive force in pursuit, contracting, and project management for commissioning 12 buildings while working at two different companies. Treasa began her career doing energy audit work in Southern California. For the past 8 years, Treasa has evaluated existing building systems and analyzed costs and savings for specific energy efficiency improvements. She is familiar with utility incentive programs in California, Washington, Nevada, and those available from the federal government. She has also developed prototype commissioning programs for fire stations and branch banks. Treasa assists owners of newly constructed facilities with planning and implementing measurement & verification (M&V). With 4 building plans completed, M&V is Treasa's newest passion. Treasa's approach to M&V helps owners get access to the data they need, meets LEED-NC certification goals, and balances capital investment. Mrs. Sweek's commissioned buildings total more than 1 million square feet and include four LEED™ Gold, two LEED™ Silver, and two LEED™ Certified buildings. She is experienced in all aspects of the commissioning process from schematic design through the first year of occupancy.

Karl Strassburg Project Manager

Relevant general commissioning experience & background: Karl has a strong background in commissioning as well as mechanical design. He has been with KBA since 2003 and his commissioning experience includes K-12 schools and higher educations buildings. He also has over 10 years in the mechanical engineering field designing a variety of mechanical systems, including hydronic, steam, air source and ground source heat pumps systems, plumbing, and controls systems.

He has received factory training with SIEBE and STAEFA control systems and is certified in ground source heat pump design and installation. While working in controls, Karl was responsible for the programming, start-up, and commissioning of building automation systems on a wide range of facilities including laboratories, athletic facilities, pharmaceutical manufacturing, commercial buildings, and schools. Karl also spent four years designing mechanical systems at Womer & Associates working with energy use modeling, heat load calculations, cost estimating, life cycle costing, and return on investment calculations. Karl is a graduate of North Seattle Community College and South Seattle Community College with separate degrees in HVAC, electronics and Liberal Arts.

Don Meyer, LEED AP Project Engineer

Relevant General Commissioning Experience & Background: Don has 35+ years of HVAC industry experience. He worked as a licensed Operating Engineer in a hospital setting and later worked in California for commercial mechanical contractors as a service, installation and startup technician. Don was employed by McQuay International as a service and overhaul technician from January 2002 through May 2006. He relocated to Seattle to run the Seattle branch for McQuay International. As McQuay's Seattle Service Manager he also supported the Portland and Vancouver B.C. offices, as well as maintaining all of Washington's customers. Don collaborated with McQuay engineering to resolve newly developed product problems. From June 2006 through May 2008 Don worked as a Service Account Executive for PSF Mechanical Inc. Don has supported facility managers and owners for all the major vertical markets: education, health care, hospital, bio-medical, manufacturing, communication, entertainment and retail. Don provided commissioned startups on most major equipment and worked with support contractors to provide seamless efficient startups.

Wesley Ellis Project Engineer

Relevant general commissioning experience & background: Since joining KBA in August of 2006 he has: performed project specification reviews, installation verification of equipment, observed TAB, completed field documentations and observed and written functional performance tests. He has proven himself to be valuable asset and support for KBA Project Managers. Also he has designed and drafted building HVAC systems and performed building energy load analysis using Trane and Aircon data calculation programs while working for CME, Inc. in Albuquerque, New Mexico.

California Branch Office

Greg Holzer, CEM, LEED AP Regional Manager

Relevant general commissioning experience & background: Mr. Holzer has over 30 years of experience in mechanical engineering and facility consulting. He has provided physical plant system performance evaluations and commissioning in hospitals, data centers and other mission critical environments throughout the U.S.

Primary functions include detailed and comprehensive evaluations of mechanical, electrical, plumbing, and controls systems; and their integration with intended operation of the facilities. His analyses have often supported master planning for additions and renovations. Subsequent to construction, Greg has typically been retained to conduct commissioning of the completed modifications and/or new construction.

Critical to his success in these activities is effective team-building and collaboration among owners and their various consultants and contractors. Among a variety of recent commissioning efforts, Mr. Holzer was the commissioning Project Manager for the Santa Clara County's Crime Laboratory Replacement, which was a LEED® Silver project, as well as CxA for the data centers for nationally recognized banks and financial institutions.

Joseph Warren, Project Manager and Senior Project Engineer

Relevant general commissioning experience & background: Joe brings over 15 years experience in laboratory facilities, plant operations, and nuclear power. He has overseen the design and construction of kilo labs and hydrogenation facilities, and written equipment operating procedures, developed preventative maintenance plans and delivered equipment specific training to lab personnel. He has also operated, maintained and repaired a wide array of laboratory equipment, including air handling and filtration systems and equipment in a 1200 square foot BSL-3 laboratory. Joe has a proven track record in strict adherence to procedures while creatively solving problems to meet deadlines He is a strong team player with the ability to rapidly acquire new skills and is able to consistently provide quality results in a timely manner. Joe has been certified in Huber Unistat Operation, Maintenance and Repair; Cold Products First Response and Cascade/Auto-Cascade Repair; Master Commercial Refrigeration, Air Conditioning & Heating Technologies; and is a certified Universal Technician.

Mark Walter, Project Manager, CBCP, CIE

Relevant general commissioning experience & background: Mark's career in the HVAC industry began in 1973. His experience includes an extensive background in Building Automation Systems (BAS), covering all phases of design, installation, programming, graphics, and start-up and commissioning. He has managed residential and commercial mechanical projects, lighting and access control projects, and the design of hazardous transportation systems. His specializations include operations and maintenance (O&M) assessments, and new and existing (retro-Cx) building commissioning (Cx).

2. Relevant Experience

The following contains KBA's relevant experience in the categories of new commissioning, retro-commissioning, re-commissioning and LEED, including the type of buildings and number of commissioning projects.

New Commissioning: Over 239 different projects. Building types: Public K-12 Schools, Colleges/Universities, Commercial Office Buildings, Parking Garages, Mixed Use Buildings, Non-Profit, Private, Utilities, Hospital/Lab, Correctional Facilities, Federal/State/Local Government Buildings, Military, Libraries, Recreational and Activity Centers.

Retro-Commissioning: Over 26 different projects. Building types: K-12 Schools, State Government Building, Correctional Facilities, Retail, Office and Military.

Re-Commissioning: 3 projects. Building types: K-12 School, Pool House, and highend residential.

LEED Commissioning: 52 projects. Building Types: K-12 Schools, Office Building, Mixed Use Building, Visitor and Recreation Centers, Parking Garages, Colleges/Universities, Local Government Buildings, and Labs. LEED program types and ratings: New construction, Core & Shell, Commercial Interiors; ratings through Platinum.

The following contains KBA's relevant experience with the following:

Maintaining Commissioning Schedules:

Over the course of completing several hundred commissioning projects, the Project Managers at KBA have become very skilled at both integrating the commissioning process into the typical master construction schedule and coordinating completion of the scheduled commissioning procedures within those published time frames. We fully understand the importance of avoiding project delays and continually work with the entire project team to insure adequate and realistic schedules are established and maintained for completion of critical commissioning procedures; including final inspections and the functional testing process.

Working with Sub-Consultants:

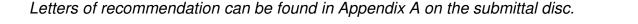
KBA has established an excellent professional relationship with a number of subconsultant companies including those providing specific expertise on low voltage electrical systems, acoustics, lighting, air & water balancing, energy measurement and verification (M&V), comprehensive design constructability review, mechanical & electrical design engineering and electrical power distribution testing. Our general rule at KBA is that we do not attempt to design and complete commissioning procedures on equipment or systems unless we feel confident that we have the specific expertise available to confidently judge both the appropriate installation and operational performance.

Experience Establishing Commissioning Criteria:

A critical part of every formal commissioning process involves the establishment of the installation and performance criteria we expect to verify. KBA works closely with the client and designers to establish these criteria early in the project, and we are often involved with developing and clarifying these criteria as part of an Owner's Project Requirements document, as required by the LEED guidelines. In addition, because of our depth of commissioning and building systems operational experience, KBA is well qualified to establish both installation and performance criteria that are considered to be typical of the workmanship and operational performance standards generally considered as acceptable for modern buildings.

3. Previous Performance

Letters of Recommendation:



The following information pertains to KBA's previous performance in the following areas:

Budget Control and Compliance:

KBA has now completed several hundred commissioning projects within a wide range of desired commissioning process scope. In every case, we have applied considerable effort to insure that our scope of services provides for a cost-effective commissioning process within the budget constraints established by our clients. We are very seldom required to ask for adjustments in our original contract agreement once the project is underway, and our clients have always been supportive of our additional services requests based on our clearly documented changes in the scope of work.

Schedule Control and Compliance:

One of our most important concerns during the management of any commissioning project is keeping our impact to the project schedule to an absolute minimum. Every project we work on has a desired completion schedule and many times these schedules are driven by very specific occupancy requirements. The goal of a good commissioning process is to actually reduce the amount of time and effort required to reach substantial completion by providing clear installation and performance expectations and an adequate schedule for demonstrating compliance with these criteria.

KBA as the Prime Commissioning Consultant:

KBA has been the prime commissioning consultant on over 95% of the projects we have worked on. Our firm specializes in developing and managing the commissioning procedures for building projects and we are internationally recognized as one of the top commissioning service provider firms currently doing business.

The following identifies a sampling of Keithly Barber Associate's previous experience in the role of primary commissioning firm of projects in the Northwest over the past five years.

K – 12 School Facilities:

- Ellensburg High School Ellensburg School District, Ellensburg, WA
- Bowlake Elementary School Highline School District, Sea-Tac, WA
- Washington High School Franklin Pierce School District, Tacoma, WA
- Richland High School Richland School District, Richland, WA
- Kent Middle School Kent School District, Kent, WA
- Kallas Junior High Puyallup School District, Puyallup, WA
- Mariner High School Mukilteo School District, Mukilteo, WA
- Rosa Parks Elementary Lake Washington School District, Redmond, WA
- Benjamin Franklin Elementary School Lake Washington School District, Kirkland, WA
- Kenmore Junior High School Northshore School District, Kenmore, WA
- Lakewood Elementary #1 Lakewood School District, Lakewood, WA
- Mt. Rainier High School Highline School District, Des Moines, WA

College & Universities:

- McConnell Hall Central Washington University, Ellensburg, WA
- Science and Technical Building Bellevue Community College, Bellevue, WA
- Redmond Campus Lake Washington Technical College, Redmond, WA
- Duwamish Campus South Seattle Community College, Seattle, WA
- Instructional Technology Center South Seattle Community College, Seattle, WA
- Labs The Evergreen State College, Olympia, WA
- Library Phase I The Evergreen State College, Olympia, WA
- Seminar II Building The Evergreen State College, Olympia, WA
- Kulshan Hall Whatcom Community College, Bellingham, WA
- Sub Rec Building Central Washington University, Ellensburg, WA
- Mountlake Terrace Hall Edmonds Community College, Edmonds, WA

Aviation Building – Everett Community College, Everett, WA

Commercial/Office:

- 505 Union Station Vulcan Northwest, Seattle, WA
- 1300 Dexter Avenue Building CFP Architects, Seattle, WA
- Qwest Field (Seahawks Stadium) WA State PSA, Seattle, WA
- Qwest Field Exhibition Center WA State PSA, Seattle, WA
- Seattle Seahawks Training Facility WA State PSA, Seattle, WA
- New Caldwell YMCA, Caldwell, ID
- 505 First Ave Starbucks Corporation, Seattle, WA
- Terry Avenue Office Building Weber Thompson Architects, Seattle, WA

Hospital/Lab:

- 401 Broadway Building Harborview Medical Center, Seattle, WA
- Harlow Medical Building, Silverdale, WA
- Children's Ambulatory Care Building Sellen Construction, Seattle, WA
- St Anthony's Hospital Sellen Construction, Gig Harbor, WA
- Children's Ambulatory Care Bellevue Sellen Construction, Bellevue, WA
- Island Hospital Addition and Renovation Island Hospital, Antacortes, WA

Federal, State & Local Government/Correctional Facilities:

- Department of Ecology Building State of Washington, Olympia, WA
- Port Townsend City Hall Renovation & Addition, Port Townsend, WA
- Seattle Crime Lab Washington State Patrol, Seattle, WA
- Kitsap County Jail, Port Orchard, WA
- Monroe Correctional Facility, Monroe, WA
- Purdy Women's Correctional Facility, Gig Harbor, WA
- Lacey City Hall Retro-Commissioning, Lacey, WA
- Firestation #10 and #2 City of Seattle, Seattle, WA
- Recreation and Activity Center City of Auburn, Auburn, WA
- Mukilteo City Hall City of Mukilteo, Mukilteo, WA

4. Geographical Proximity

The following contains Keithly Barber Associate's physical location and the names and titles of our dedicated staff.

Keithly Barber Associates, Inc. Corporate Office Location:

14237R Ambaum Boulevard Southwest Burien, Washington 98166

Dedicated Staff at this Location:

Kent Barber, PE, LEED AP – Managing Principal

Jeremy Fugere, LEED AP, ACG CxA - Principal/Senior Project Manager

Ryan Hay, PE, LEED AP, ACG CxA – Principal/Senior Project Manager

Pete Keithly, CDT, LEED AP, ACG CxA - Project Manager

Karl Strassburg - Project Manager

Myra Ferriols, LEED AP – Project Manager

Treasa Sweek, PE, LEED AP, BCA CCP - Project Manager

Wes Ellis – Project Engineer

Don Meyer, LEED AP – Project Engineer

Debbie Batt – Business Manager

Rebeca DeJesus – Administrative Assistant

Standard Federal Form 330:

This document can be found in Appendix B on the submittal disc.